



**Rail Enhancement Fund
Project Application Form**

Internal Use <u>2010003</u> DRPT Tracking #

Date: 2-2-2009

A. Name of Applicant (Name and Address)

Virginia Railway Express (VRE)
1500 King Street, Suite 202
Alexandria, VA 22314

Applicant type:

- ☒ Passenger Railroad
☐ Freight Railroad
☐ Locality
☐ Business
☐ Other _____

B. Contact Information:

Responsible Person/Title: Dale Zehner, Chief Executive Officer

Telephone: (703) 838-5411 Fax: (703) 684-1313 Email: dzehner@vre.org

Project Manager/Title: Sirel Mouchantaf, Director of Construction and Facilities

Telephone: (703) 838-5448 Fax: (703) 838-5448 Email: smouchantaf@vre.org

C. Project Title:

Arkendale-Powell's Creek Third Track.Cherry Hill VRE Station: Phase III – Permitting, Right of Way Acquisition and First Year Construction

D. Project Location: (City/County, Rail line, Railroad Mile Post, attach map)

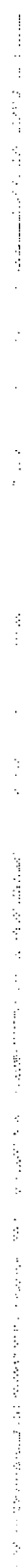
Prince-William and Stafford Counties
CSX Transportation/Virginia Railway Express
RF&P Subdivision, CFP 72.0 to CFP 83.4 (11.4 miles)

E. Owner of Property/Right-of-Way/Facility/Personal Property:

CSX Corporation

F. Responsible Party for Continuous Maintenance of Project:

CSX Corporation/VRE

[illegible]

G. Project Information:

1) Description of Project:

The purpose of this project is to improve rail service in the 11.4 mile corridor between Powells Creek and Arkendale. The full project includes design and construction of a third track in the CSX right-of-way, including a VRE station, slope stabilization, parking facility and highway grade separated bridge over CSX tracks. This is a multi-year project for which Phases I and II are funded and underway.

2) Project Objective:

The objective of the third track project is to improve railroad capacity to allow for improved on-time performance and the expansion of service. Specifically, this project will allow passing moves between faster passenger trains and slower freight trains with simultaneous train moves in the opposite direction. Both north-south continuous moves of two trains while a third VRE or Amtrak train is servicing the future Cherry Hill station will also become a reality. Finally, a continuous two-way bypass to a stalled train on any portion of the third track would be possible through the completion of this project.

3) Relationship to Other Projects under Development by Applicant or Previously Funded by this Program:

VRE applied for and received \$2.5 million in Rail Enhancement Funds for preliminary engineering and environmental assessment work during the FY 2005-2006 process, another \$3,700,000 for final design was received during the FY 2008 process. This work is underway and is expected to be completed in Fall of 2009. Application for permitting, right of way acquisition and first year of construction is being requested at this time so that the project can move into the third phase uninterrupted.

This project has a relationship with several other VRE projects currently underway or recently completed, including the Quantico Bridge project. The bridge project, which added capacity to the single water crossing at Quantico Creek, received both federal and state funding and has resulted in significant improvements to VRE's on-time performance. In addition, VRE is a partner with the Commonwealth of Virginia/DRPT and CSX in a memorandum of understanding (MOU) committing to a series of improvements to expand rail capacity in the CSX corridor between Fredericksburg, VA and Washington, DC. The construction of a third track between Fredericksburg and Washington, DC is included in this MOU.

To date, and in addition to the Quantico Bridge, completed projects include rebuilding the AF interlocking; Arkendale and Elmont crossovers; L'Enfant 3rd main track; and RO to SRO/Slater's Lane. Projects underway or to be completed include three additional third track projects at Franconia and Fredericksburg to Hamilton.

4) Describe the Public Benefit of Project. Identify significant types of benefits and beneficiaries from this project. (See Attachment A)

The VRE provides commuter service to 7,350 people (approximately 14,700 average daily commuter trips) throughout northern and central Virginia, including service to approximately 4,200 government and military workers. As an energy efficient mode, VRE helps to reduce regional air emissions and congestion and is also a critical component of the region's transportation infrastructure for evacuation from the District of Columbia in the event of an emergency.

This section of the Washington to Richmond corridor is extremely congested due to use by commuter, freight and inter city passenger trains. As such, improvements to the capacity of this corridor would result in improvements to all three modes, as well as those using the parallel highways who will realize a reduction in other vehicles on the road.

For VRE, the reduction or elimination of delays due to conflicts between freight and passenger trains would have a significant benefit to the nearly 7,754 passenger trips on the Fredericksburg line daily. An elimination or reduction in delays would result in improved on-time performance and a subsequent increase in ridership. Finally, the construction of a parking facility at the Cherry Hill station would allow a minimum of an additional 550 passengers to access the system each day.

Amtrak would also realize a public benefit as they operate approximately 125 inter city trains through this corridor each week. Improving on-time performance of these trains would also benefit their ridership such that it would become a more attractive option to travelers currently using congested I-95.

More efficient train movement and the subsequent reduction in freight delays would make it a more economical and attractive means of transporting goods than via the highway; and ultimately reduce demand for truck transport.

Finally, the Virginia Department of Rail and Public Transportation (DRPT) has long considered the third track between Washington, D.C. and Richmond as a means to accommodate additional future passenger and freight service, including commuter rail service to Richmond. Without these capacity improvements, such expanded services are not likely.

5) Attachment A – Project Data Information Form – Must be completed by Applicant and submitted with this application.

H. Type of Project:

- 1) ☒ New Construction ☐ Rehabilitation ☐ Study
- 2) ☒ Rail Infrastructure ☐ Rail Facility/Station
☐ Equipment/Rolling Stock ☐ Signals/Communication Equipment
- 3) Other _____

I. Application Scope of Work Covers:

☐ Entire Project ☒ A Phase of a Multi-Phase Project ☐ Completion Phase

J. Project Budget Summary (Phase III – Permitting, Right of Way Acquisition and First Year Construction

);

Preliminary Service, Engineering, or Feasibility Study	_____
Environmental Evaluation	_____
Design Engineering	_____
Right of Way Acquisition/Permitting	<u>\$950,000</u>
Construction (Year 1)	<u>\$16,650,000</u>
Construction Management	_____
Lease/Acquisition of Equipment	_____
Public Involvement (if applicable)	_____
Other _____	_____

Subtotal Project Budget	\$	17,600,000
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Total Project Budget	\$	17,600,000*
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*Please note that while the total estimated project cost is \$72.1 million, budget information is only being provided for this phase of the project.

K. Attach detailed budget and schedule information. If the project is for final design, construction or procurement; then plans, specifications and reports to a preliminary engineering level (approximately 30%) should be provided to support the project cost and major features (if applicable). A sample budget and schedule is included in Appendix D.

L. Rail Enhancement Funds Requested in this Application: \$ 12,320,000

Maximum 70% of Total Project Budget. Do not include any previous allocations or future phases.

M. Local Match Required by Applicant: \$ 5,280,000
At least a minimum 30% of Total Project Budget

If Overmatch, Provide Percentage

1) Match Breakdown by Source (Including any in-kind match)

- a. Provider of Local Match: Lee Carolina, LLC
- b. Status (confirmed/anticipated) - confirmed
- c. Attach justification for value of in-kind match.

2) Other Funding Sources Beyond Match Requirement

- a. Provider of Overmatch
- b. Status (confirmed/anticipated)

N. Project implementation schedule (based in months). List major milestones of the project, including environmental review and public involvement points if applicable.

Following receipt of funding/NTP from Commonwealth:

- 1. Permitting and ROW Acquisition – 6 months
- 2. First Year of Construction – 12 months

O. Statement of how this project promotes or does not preclude dual/multi-access use.

The third track project not only provides additional capacity for VRE, but also Amtrak and freight trains. Once complete, the Cherry Hill station will provide additional access to VRE for Prince William County residents.

P. List additional users of rail line, facility, and/or equipment.

Amtrak, CSX Corporation and other freight railroads

Q. Identify any possible environmental or other issues/concerns within the scope of this project.

VRE anticipates a moderate level of environmental effects associated with the proposed third track. No river or major stream crossings are necessary, although construction along narrow rights-of-way does occur along existing bodies of water. Work to procure an environmental assessment of these issues is currently underway.

Required Attachments:

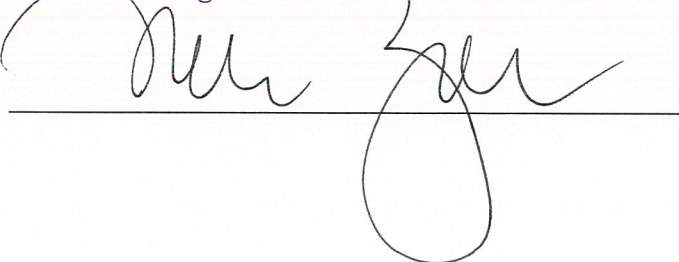
Application is not complete without items 1-5 completed by the Applicant and submitted with the Application.

- 1. Attachment A - Project Data Information Form (Provided)**
- 2. Attachment B - Application Checklist (Provided)**
- 3. Detailed cost, budget and schedule. Include preliminary engineering to 30% report, if applicable (Sample in Appendix D)**
- 4. Certification of Match/% of Match/Documentation of Source of Match Including Defined Match Source (To be provided by Applicant)**
- 5. Certification of Additive Investment (To be provided by Applicant)**
- 6. Statement from the Applicant/Owner of the facility that the SWAM participation goals will be achieved by the project.**
- 7. Statement from the owner of the facility that acknowledges the Commonwealth will have a public interest in the facilities, materials, equipment and improvements funded or impacted by this project (To be provided by Applicant/Owner)**

Application and Attachment Certification

To the best of my knowledge all information contained in this application and its attachments is true. The information provided to the Virginia Department of Rail and Public Transportation (DRPT) is subject to full disclosure except where protected by Virginia Code. Any additional documentation related to this application will be provided to DRPT upon request.

Authorized Signature and Title:

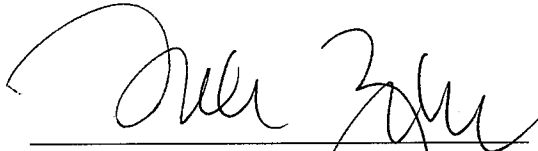


Date: 2/2/2009

Certification of Match/%of Match/Documentation of Source of Match (To be provided by Applicant)

To Whom It May Concern:

I hereby certify that \$5,280,000, or 30 percent, of the cost of the Arkendale-Powell's Creek Third Track Cherry Hill VRE Station: Arkendale-Powell's Creek Third Track.Cherry Hill VRE Station: Phase III – Permitting, Right of Way Acquisition and First Year Construction project will be covered by private in-kind donations. The contributions are currently pledged towards the project.



Signed by

Chief Executive Officer, Virginia Railway Express

Title

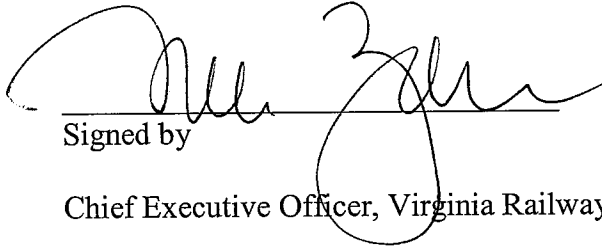
February 2, 2009

Date

Certification of Additive Investment

To Whom It May Concern:

I hereby certify that the Arkendale-Powell's Creek Third Track Cherry Hill VRE Station: Phase III – Permitting, Right of Way Acquisition and First Year Construction project would provide an additive investment to the Commonwealth of Virginia's rail system. The project will provide increased capacity for passenger, freight and inter-city rail service on the Washington-Richmond Corridor.



Signed by

Chief Executive Officer, Virginia Railway Express

Title

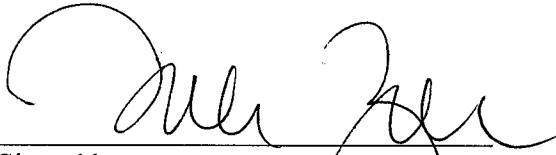
February 2, 2009

Date

Statement from the Applicant/Owner of the facility that the SWAM participation goals will be achieved by the project.

To Whom It May Concern:

I hereby certify that the Arkendale-Powell's Creek Third Track Cherry Hill VRE Station: Phase III – Permitting, Right of Way Acquisition and First Year Construction project will comply with the Small, Women, and Minority (SWAM) enterprises participation goals established for the Rail Enhancement Fund Program.



Signed by
Chief Executive Officer, Virginia Railway Express

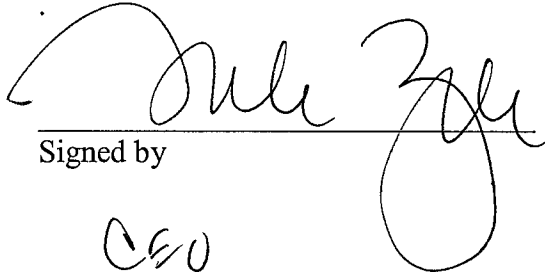
February 2, 2009

Date

Statement from the owner of the facility that acknowledges the Commonwealth will have a Public Interest in Private Facilities impacted by this project

To Whom It May Concern:

At the appropriate time, VRE will enter into an appropriate agreement to be negotiated with the Commonwealth of Virginia to protect the Commonwealth's public interest in the Arkendale-Powell's Creek Third Track project, located along the CSX RF&P Subdivision between Milepost CFP 72.0 and Milepost CFP 83.4.

A large, stylized handwritten signature in black ink, appearing to read "Mike Zili", is written over a horizontal line.

Signed by

Handwritten initials "CEO" in black ink, written below the signature line.

Title

February 2, 2009

Date



**Rail Enhancement Fund
Project Application**

Internal Use

DRPT Tracking #

**Attachment A
Project Data Information Form**

Date: **2-2-2009**

Name of Applicant and Project

Applicant:

Virginia Railway Express (VRE)
1500 King Street
Suite 202
Alexandria, VA 22314

Project:

Arkendale-Powell's Creek Third Track.Cherry Hill VRE Station: Phase III – Permitting, Right of Way Acquisition and First Year Construction

General Instructions: Please complete the following forms that apply to the project application.

- For Freight Service projects, complete forms A1, A2 and A5
- For Intercity/Amtrak passenger projects, complete forms A1, A3 and A5
- For Commuter/VRE passenger projects, complete forms A1, A4 and A5
- For projects that involve benefits to both freight and passenger projects, form A1 and forms A2-A4 that apply must be completed. For each completed form A2-A4, a form A5 must be completed for each category for projects resulting in multiple project benefits.

Terms:

Project Cost and Construction Period: Form A1 shall be completed with total project cost by year of expenditure with total DRPT cost identified by year of expenditure. This section must be completed for all project applications.

Demand Characteristics: This category of information relates to the additional demand for rail service (including freight and passenger) due to the project. This additional demand must be over and above baseline conditions that currently exist. The specific data to enter here defines initial demand, steady state demand, and the years until steady state demand is achieved.

Steady State Demand: This term refers to the point at which the project benefits/demand have reached a long-term, sustainable level.

Project Impact on Travel Distance: This category of information includes the distance that would be traveled by vehicle or train. All distances should be limited to miles within Virginia. The distance should relate directly to the project-impacted area.

Demand Characteristics for a 15-year Performance Period: This term refers to the project output by performance year, which will be utilized to determine the public benefits and to determine the performance requirements over the 15-year Performance Period of the Grant Agreement.

Attachment A
Form A1 – Project Cost and Construction Period

First Construction Year: 2010

Last Construction Year: 2011

Year	Total Project COST	Total DRPT COST
Year 1	\$950,000	\$665,000
Year 2	\$16,650,000	\$11,655,000
Year 3		
Year 4		
Year 5		
Total	\$17,600,000	\$12,320,000

Use Form A-5 to provide demand characteristics for the 15-Year Performance Period.

Attachment A
Form A4 – Passenger Service – Commuter/VRE

Demand Characteristics	CATEGORY	UNITS	VALUE
	Annual VRE Passengers (Existing)	Passenger/Year	3,386,864 (FY2007)
	Steady State Demand – Additional VRE Passengers	Passenger/Year	156,736*
	First Year Number of Additional Passengers	Passenger/Year	99,200
	Number of Years Until Steady State	Number of Years	2

*Note – ridership assumed to be constrained due to size of parking facility.

Project Impact on Travel Distance & Time	CATEGORY	UNITS	VALUE
	VRE Passenger Trip Length (Existing)	Miles	54.1 Fredericksburg Line 35.7 Manassas Line
	VRE Passenger Trip Length (After Project Completion)	Miles	54.1 Fredericksburg Line 35.7 Manassas Line
	VRE Travel Time Per Trip (Existing)	Minutes	81.5 system average 90.2 Fredericksburg Line average 74.4 Manassas Line average
	VRE Travel Time Per Trip (After Project Completion)	Minutes	83.8 system average 93.2 Fredericksburg Line* average 74.4 Manassas Line average

*Note – travel time has increased due to additional dwell time/acceleration/deceleration resulting in the addition of a Cherry Hill station. Time savings is the result of a decrease in delays which in 2007 were averaging twelve per month on the Fredericksburg line. These delays were averaging 19 minutes and attributable to other train movements/congestion.

Attachment A
Form A5 – Demand Characteristics for 15-Year Performance Period

Performance Year	Performance Value*
1	99,200
2	99,200
3	156,736
4	156,736
5	156,736
6	156,736
7	156,736
8	156,736
9	156,736
10	156,736
14	156,736
12	156,736
13	156,736
14	156,736
15	156,736
Total	2,235,968

* For Freight Service Projects – car loads or containers per year
 For Inter-City / Amtrak Passenger Projects – passengers per year
 For Commuter / VRE Passenger Projects – passenger trips per year

Brogan, Darryl (DRPT)

From: Brogan, Darryl [Darryl.Brogan@hatchmott.com]
Sent: Friday, February 13, 2009 2:52 PM
To: Brogan, Darryl (DRPT)
Subject: FW: Cherry Hill REF

From: Page, Kevin (DRPT) [mailto:kevin.page@drpt.virginia.gov]
Sent: Friday, February 13, 2009 2:47 PM
To: Knott, Michael (DRPT); Kristopher.Naleszkiewicz@hdrinc.com; Brogan, Darryl
Subject: Fw: Cherry Hill REF

See below.

Regards,

Kevin B. Page
 Chief of Rail Transportation
 VA Dept. of Rail and Public Transportation
 1313 East Main Street, Suite 300
 Richmond, VA 23219
 804.786.3963 v
 804.840.3706 c
 kevin.page@drpt.virginia.gov

Message sent via Blackberry

From: Sirel Mouchantaf
To: Page, Kevin (DRPT)
Cc: Jennifer Straub ; Christine Hoeffner
Sent: Fri Feb 13 14:42:59 2009
Subject: Cherry Hill REF

Kevin,

The ridership numbers that were provided in Attachment A of all REF applications were based on individual riders not trips. For trips, double the figures submitted. For Cherry Hill specifically, ridership projections obtained from the PE/EA work currently underway produced the following:

- Year 2015 – 72,912 trips
- Year 2030 – 344,224 trips

This is based on a 3 minute average reduction in delay time.

The total cost of the project is estimated at \$72,058,842. Assuming a 30% match, the cost for the next three years are;

- \$17,600,000 Total / \$12,320,000 DRPT (FY 09, current application)
- \$23,593,421 Total / \$16,515,395 DRPT (FY 10, future application)
- \$23,593,421 Total / \$16,515,395 DRPT (FY 11, future application)

2/23/2009

Sirel Mouchantaf, PE CCM
Director of Construction and Facilities

Virginia Railway Express
1500 King St., Suite 202
Alexandria, VA 22314
Office Phone/PC Fax - (703) 838-5448
Cell - (571) 221-7900

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**Rail Enhancement Fund
Project Application Checklist
Attachment B**

Internal Use

DRPT Tracking #

Date: 2-2-2009

Name of Applicant and Project:

Applicant:

Virginia Railway Express (VRE)
1500 King Street
Suite 202
Alexandria, VA 22314

Project:

Arkendale-Powell's Creek Third Track, Cherry Hill VRE Station: Phase III – Permitting, Right of Way Acquisition and First Year Construction

Checklist for Application

1. Project is consistent with goals of applicable adopted state, regional and/or local plans.

☒ Yes ☐ No

2. Project is an Additive Investment to Virginia.

☒ Yes ☐ No

3. Project provides for, or does not preclude, shared or dual access opportunity.

☒ Yes ☐ No

4. Applicant has provided documentation and certification of at least a minimum 30% match.

☒ Yes ☐ No

5. Applicant has provided an environmental review plan and/or public involvement plan, if applicable, and required budget for this activity as outlined in Appendix D.

☐ Yes ☒ No – Environmental review is scheduled to begin in early spring, 2008.

Internal Use

DRPT Tracking #

6. Application is complete, including signature and specified number of hard copies and an electronic (pdf file) copy; and Applicant has reviewed the Standard Agreement as provided in Appendix C.

☒ Yes ☐ No

PROJECT BUDGET - SCHEDULE OF VALUES

Program: Rail Enhancement Fund
Agreement: Virginia Railway Express
Grantee: Arkendale-Powell's Creek Third Track/Cherry Hill VRE Station
Project:

Scopes	Description of Work	Quantity	Unit Rate	Contract Value	Total to Date		Previous Total		Total This Period	
					Quantity/ Percentage	Value	Quantity/ Percentage	Value	Quantity/ Percentage	Value
Preliminary										
	Permitting	1	\$ -	\$ 550,000						
	ROW Acquisition			\$ 400,000						
	Subtotal			\$ 950,000						
Construction	First Year costs only			\$ 16,650,000						
	Subtotal			\$ 17,600,000						
	SUBTOTAL DIRECT EXPENSES			\$ 17,600,000						
				\$ -						
	AGREEMENT TOTAL			\$ 17,600,000						
	Maximum DRPT Participation	70%		\$ 12,320,000						
	Local Match Participation (in-kind)	30%		\$ 5,280,000						

*Note- previously funded

**Rail Enhancement Fund
Environmental Review and Public Involvement Plan**

Date: **2-2-2009**

VRE is in the process of completing a draft Environmental Assessment per the National Environmental Policy Act (NEPA) for the proposed third track. This effort is expected to be completed and submitted to DRPT for review by June 2009.

To date, the Purpose and Need statement was submitted and reviewed by DRPT. A Phase I Environmental Assessment and Wetland Delineation have been completed and will be submitted for review as part of the Environmental Assessment. Agency coordination is also underway to gather stakeholder input and concerns and determine the necessary permitting. The permit application efforts (Joint Permit Application) will begin during the final design phase of the project.

The public involvement plan will provide stakeholder coordination to all applicable agencies. General public information is also being provided by VRE website and literature. A formal Public Hearing will be held once this draft environmental document is complete and the plans have been developed to a point that the public can identify impacts to adjacent properties and right of way requirements have been identified. At which time the general public will be encourage to comment.

SUMMARY

Location #	Preferred "Eastern" Alignment Option	Cost Estimate	Alternate Western Alignment Option	Cost Estimate
1	Option 1	\$4,737,730	Option 1	\$4,737,730
2	Option 1	\$5,442,748	Option 3 *	\$4,945,198
3	Option 1	\$2,494,803	Option 2 *	\$2,492,865
4	Option 1	\$4,151,016	Option 2 *	\$4,277,535
5	Option 1	\$2,730,713	Option 2 *	\$2,773,919
6	Option 1	\$4,588,620	Option 2 *	\$4,485,158
7	Option 2	\$1,104,453	Option 2	\$1,104,453
8	Option 2	\$5,777,362	Option 2	\$5,777,362
9	Option 1	\$4,452,375	Option 2	\$9,548,310
10	Option 1	\$2,425,750	Option 2	\$3,840,125
11	Option 2 *	\$829,250	Option 2 *	\$829,250
12	Option 1	\$1,696,630	Option 2	\$1,444,755
TOTAL		\$40,431,448		\$46,256,658
Escalation (at 4% per year)				
Year 2010 (Construction)		\$43,730,653.89		\$50,031,201.02

* Location of track will impact right-of-way. Costs of right-of-way acquisition are not included.
 Costs for fiber optic relocation not included in the estimate
 Costs for CSX signal upgrade is not included in the estimate

CHERRY HILL/THIRD TRACK

1/26/2009

ALIGNMENT OPTIONS

LOCATION #: 1

STA. 3905+00 to STA. 4005+00

Preliminary Cost Estimate			East (begin sta 3922+50)		West		East (begin sta 3910+00)	
			Option 1		Option 2		Option 3	
			Quantity	Cost	Quantity	Cost	Quantity	Cost
Track to be Constructed ¹	LF	\$300	8250	\$2,475,000	8250	\$2,475,000	9500	\$2,850,000
Track to be Lined	LF	\$40		\$0	4600	\$184,000		\$0
No. 20 Turn Out	EA.	\$90,000	1	\$90,000	1	\$90,000	1	\$90,000
No. 20 Cross-Over	EA.	\$180,000		\$0		\$0		\$0
Earthwork	LS		1	\$412,500	1	\$412,500	1	\$475,000
Drainage Items								
12" C.I. Pipe	LF	\$50	20	\$1,000	20	\$1,000	20	\$1,000
12" C.I. Pipe	LF	\$50	20	\$1,000	20	\$1,000	20	\$1,000
6' Brick Arch	LF	\$110	20	\$2,200	20	\$2,200	20	\$2,200
6' Brick Arch	LF	\$110	20	\$2,200	20	\$2,200	20	\$2,200
24" C.I. Pipe	LF	\$55	20	\$1,100	20	\$1,100	20	\$1,100
18" C.I. Pipe	LF	\$50	20	\$1,000	20	\$1,000	20	\$1,000
18" C.I. Pipe	LF	\$50	20	\$1,000	20	\$1,000	20	\$1,000
24" C.I. Pipe	LF	\$55	20	\$1,100	20	\$1,100	20	\$1,100
Erosion & Siltation Control	LS		1	\$30,000	1	\$30,000	1	\$30,000
Grade Crossing (sta 3920+00)	LF	\$150					40	\$6,000
Grade Crossing (sta 3960+00)	LF	\$150	40	\$6,000	40	\$6,000	40	\$6,000
Wetland Mitigation	SF	\$2.50	13000	\$32,500	9700	\$24,250	25000	\$62,500
Structure	LS			\$0		\$0		\$0
Sub-Total				\$3,056,600		\$3,232,350		\$3,530,100
Miscellaneous ²				\$1,069,810		\$1,131,323		\$1,235,535
Contingency ³				\$611,320		\$646,470		\$706,020
TOTAL				\$4,737,730		\$5,010,143		\$5,471,655

¹ Includes sub-ballast, ballast, rail² 35% for minor pay item quantities (based on Sub -Total)³ 20% (based on Sub -Total)

CHERRY HILL/THIRD TRACK

ALIGNMENT OPTIONS

1/26/2009

LOCATION #: 2

STA. 4005+00 to STA. 4040+00

Preliminary Cost Estimate			East		West		Transition E/W	
			Option 1		Option 2		Option 3	
			Quantity	Cost	Quantity	Cost	Quantity	Cost
	Unit	Unit Cost						
Track to be Constructed ¹	LF	\$300	3500	\$1,050,000	3500	\$1,050,000	3500	\$1,050,000
Track to be Lined	LF	\$40		\$0		\$0	2600	\$104,000
No. 20 Turn Out	EA.	\$90,000		\$0		\$0		\$0
No. 20 Cross-Over	EA.	\$180,000		\$0		\$0		\$0
Earthwork	LS		1	\$225,000	1	\$175,000	1	\$200,000
Drainage Items								
6' Brick Arch	LF	\$110	20	\$2,200	20	\$2,200	20	\$2,200
18" C.I. Pipe	LF	\$50	20	\$1,000	20	\$1,000	20	\$1,000
Erosion & Siltation Control	LS		1	\$20,000	1	\$17,500	1	\$20,000
Wetland Mitigation	SF	\$2.50	16500	\$41,250	7200	\$18,000	16500	\$41,250
Structure								
Bridge (sta. 4025+50)	SF	\$310	1200	\$372,000	1200	\$372,000	1200	\$372,000
Retaining Wall (sta. 4035+00)	LF	\$2,000	900	\$1,800,000		\$0	700	\$1,400,000
Sub-Total				\$3,511,450		\$1,635,700		\$3,190,450
Miscellaneous ²				\$1,229,008		\$572,495		\$1,116,658
Contingency ³				\$702,290		\$327,140		\$638,090
TOTAL				\$5,442,748		\$2,535,335		\$4,945,198

¹ Includes sub-ballast, ballast, rail² 35% for minor pay item quantities (based on Sub -Total)³ 20% (based on Sub -Total)

Bridge: area = 20' x 60' = 1200 sq. ft.

Retaining wall = 700' length x 15' ht.

CHERRY HILL/THIRD TRACK

1/26/2009

ALIGNMENT OPTIONS

LOCATION #: 3

STA. 4040+00 to STA. 4080+00

Preliminary Cost Estimate			East		West	
			Option 1		Option 2	
	Unit	Unit Cost	Quantity	Cost	Quantity	Cost
Track to be Constructed ¹	LF	\$300	4000	\$1,200,000	4000	\$1,200,000
Track to be Lined	LF	\$40		\$0		\$0
No. 20 Turn Out	EA.	\$90,000		\$0		\$0
No. 20 Cross-Over	EA.	\$180,000		\$0		\$0
Earthwork	LS	\$200,000	1	\$200,000	1	\$200,000
Drainage Items						
3' Brick Arch	LF	\$65		\$0	20	\$1,300
3' Brick Arch	LF	\$65	20	\$1,300		\$0
West End 18" C.I. Pipe	LF	\$50		\$0	20	\$1,000
East End 18" Brick Arch	LF	\$50	20	\$1,000		\$0
Erosion & Siltation Control	LS	\$20,000	1	\$20,000	1	\$20,000
Wetland Mitigation	SF	\$2.50	500	\$1,250		\$0
Structure						
Bridge (sta 4060+00)	SF	\$310	600	\$186,000	600	\$186,000
Sub-Total				\$1,609,550		\$1,608,300
Miscellaneous ²				\$563,343		\$562,905
Contingency ³				\$321,910		\$321,660
TOTAL				\$2,494,803		\$2,492,865

¹ Includes sub-ballast, ballast, rail² 35% for minor pay item quantities (based on Sub -Total)³ 20% (based on Sub -Total)

Bridge: area = 20' x 30' = 600 sq. ft.

CHERRY HILL/THIRD TRACK

1/26/2009

ALIGNMENT OPTIONS

LOCATION #: 4

STA. 4080+00

to STA. 4155+00

4155+00

Preliminary Cost Estimate			East		West	
			Option 1		Option 2	
	Unit	Unit Cost	Quantity	Cost	Quantity	Cost
Track to be Constructed ¹	LF	\$300	7500	\$2,250,000	7500	\$2,250,000
Track to be Lined	LF	\$40		\$0		\$0
No. 20 Turn Out	EA.	\$90,000		\$0		\$0
No. 20 Cross-Over	EA.	\$180,000		\$0		\$0
Earthwork	LS	\$375,000	1	\$375,000	1	\$375,000
Drainage Items						
8' Brick Arch - 66.6'	LF	\$200	20	\$4,000	20	\$4,000
West End 16" C.I. Pipe	LF	\$50		\$0	20	\$1,000
East End 18" Brick Arch	LF	\$50	20	\$1,000		\$0
? Brick Arch	LF	\$110	20	\$2,200	20	\$2,200
West End 3' Brick Arch	LF	\$65		\$0	20	\$1,300
East End 3'x4' Stone Box	LF	\$65	20	\$1,300		\$0
West End 3' Brick Arch	LF	\$65		\$0	20	\$1,300
East End 3'x3' Stone Box	LF	\$65	20	\$1,300		\$0
West End 3' Brick Arch	LF	\$65		\$0	20	\$1,300
East End 3'x3' Stone Box	LF	\$65	20	\$1,300		\$0
30" Conc. Pipe on each end	LF	\$55	20	\$1,100	20	\$1,100
Erosion & Siltation Control	LS	\$37,500	1	\$37,500	1	\$37,500
Wetland Mitigation	SF	\$2.50	1350	\$3,375	34000	\$85,000
Structure	LS			\$0		\$0
Sub-Total				\$2,678,075		\$2,759,700
Miscellaneous ²				\$937,326		\$965,895
Contingency ³				\$535,615		\$551,940
TOTAL				\$4,151,016		\$4,277,535

¹ Includes sub-ballast, ballast, rail² 35% for minor pay item quantities (based on Sub -Total)³ 20% (based on Sub -Total)

CHERRY HILL/THIRD TRACK

1/26/2009

ALIGNMENT OPTIONS

LOCATION #: 5

STA. 4155+00

to STA. 4170+00

4170+00

Preliminary Cost Estimate			East		West	
			Option 1		Option 2	
	Unit	Unit Cost	Quantity	Cost	Quantity	Cost
Track to be Constructed ¹	LF	\$300	1500	\$450,000	1500	\$450,000
Track to be Lined	LF	\$40		\$0		\$0
No. 20 Turn Out	EA.	\$90,000		\$0		\$0
No. 20 Cross-Over	EA.	\$180,000		\$0		\$0
Earthwork	LS	\$75,000	1	\$75,000	1	\$75,000
Drainage Items						
18" Wood Box	LF	\$50	20	\$1,000	20	\$1,000
				\$0		\$0
				\$0		\$0
Erosion & Siltation Control	LS	\$7,500	1	\$7,500	1	\$7,500
Wetland Mitigation	SF	\$2.50	1700	\$4,250	12850	\$32,125
Structure						
Bridge (Sta. 416+00)	SF	\$340	3600	\$1,224,000	3600	\$1,224,000
Sub-Total				\$1,761,750		\$1,789,625
Miscellaneous ²				\$616,613		\$626,369
Contingency ³				\$352,350		\$357,925
TOTAL				\$2,730,713		\$2,773,919

¹ Includes sub-ballast, ballast, rail² 35% for minor pay item quantities (based on Sub -Total)³ 20% (based on Sub -Total)

Bridge = area = 180' x 20' = 3600 sq. ft.

CHERRY HILL/THIRD TRACK

1/26/2009

ALIGNMENT OPTIONS

LOCATION #: 6

STA. 4170+00 to STA. 4205+00

Preliminary Cost Estimate			East		West	
			Option 1		Option 2	
	Unit	Unit Cost	Quantity	Cost	Quantity	Cost
Track to be Constructed ¹	LF	\$300	3500	\$1,050,000	3500	\$1,050,000
Track to be Lined	LF	\$40	2800	\$112,000		\$0
No. 20 Turn Out	EA.	\$90,000		\$0		\$0
No. 20 Cross-Over	EA.	\$180,000		\$0		\$0
Earthwork	LS	\$175,000	1	\$175,000	1	\$175,000
Drainage Items						
Erosion & Siltation Control	LS	\$10,000	1	\$10,000	1	\$10,000
Wetland Mitigation	SF	\$2.50	2400	\$6,000	20500	\$51,250
Structure						
Highway Bridge (New)	SF	\$200	7437	\$1,487,400	7437	\$1,487,400
Demolition (exist. Bridge)	LS	\$120,000	1	\$120,000	1	\$120,000
Sub-Total				\$2,960,400		\$2,893,650
Miscellaneous ²				\$1,036,140		\$1,012,778
Contingency ³				\$592,080		\$578,730
TOTAL				\$4,588,620		\$4,485,158

¹ Includes sub-ballast, ballast, rail² 35% for minor pay item quantities (based on Sub -Total)³ 20% (based on Sub -Total)

New bridge area = 37' x 201' = 7437 sq. ft.
 Bridge demolition (exist) LS = \$120,000
 Ret. Wall (under east span) 100'

CHERRY HILL/THIRD TRACK

1/26/2009

ALIGNMENT OPTIONS

LOCATION #: 7

STA. 4205+00 to STA. 4230+00

Preliminary Cost Estimate			East		West	
			Option 1		Option 2	
	Unit	Unit Cost	Quantity	Cost	Quantity	Cost
Track to be Constructed ¹	LF	\$300	2500	\$750,000	1500	\$450,000
Track to be Lined	LF	\$40		\$0	1000	\$40,000
No. 10 Turn Out	EA.	\$75,000		\$0	1	\$75,000
No. 20 Cross-Over	EA.	\$180,000		\$0		\$0
Earthwork	LS	\$125,000	1	\$125,000	1	\$125,000
Drainage Items						
West End 3' Brick Arch	LF	\$65		\$0	20	\$1,300
East End 3'x4' Brick/Stone Box	LF	\$65	20	\$1,300		\$0
36" Conc. Storm Drain	LF	\$65	20	\$1,300	20	\$1,300
36" Conc. Storm Drain	LF	\$65	20	\$1,300	20	\$1,300
60" Conc. Storm Drain	LF	\$110	20	\$2,200	20	\$2,200
66" Conc. Storm Drain	LF	\$120	20	\$2,400	20	\$2,400
West End 3' Brick Arch	LF	\$65		\$0	20	\$1,300
East End 3'x4' Stone Box	LF	\$65	20	\$1,300		\$0
Grade Crossing (Sta 4227+00)	LF	\$150	35	\$5,250	35	\$5,250
Erosion & Siltation Control	LS	\$7,500	1	\$7,500	1	\$7,500
Wetland Mitigation	SF	\$2.50		\$0		\$0
Structure	LS			\$0		\$0
Sub-Total				\$897,550		\$712,550
Miscellaneous ²				\$314,143		\$249,393
Contingency ³				\$179,510		\$142,510
TOTAL				\$1,391,203		\$1,104,453

¹ Includes sub-ballast, ballast, rail² 35% for minor pay item quantities (based on Sub -Total)³ 20% (based on Sub -Total)

CHERRY HILL/THIRD TRACK

1/26/2009

ALIGNMENT OPTIONS

LOCATION #: 8

STA. 4230+00 to STA. 4305+00

Preliminary Cost Estimate			East to West		West	
			Option 1		Option 2	
	Unit	Unit Cost	Quantity	Cost	Quantity	Cost
Track to be Constructed ¹	LF	\$300	5447	\$1,634,100	5447	\$1,634,100
Track on Exist. Bridge	LF	\$110	1753	\$192,830	1753	\$192,830
Track to be Lined	LF	\$40	2000	\$80,000		\$0
No. 20 Turn Out	EA.	\$90,000		\$0		\$0
No. 20 Cross-Over	EA.	\$180,000		\$0		\$0
Earthwork	LS	\$35,000	1	\$35,000	1	\$35,000
Drainage Items						
36" Conc. Storm Drain	LF	\$65	20	\$1,300	20	\$1,300
West End 3' Brick Arch	LF	\$65	20	\$1,300	20	\$1,300
East End 3'x4' Stone Box	LF	\$65	20	\$1,300	20	\$1,300
16' Arch Culvert	LS	\$200,000	1	\$200,000	1	\$200,000
Grade Crossing (sta 4260+50)	LF	\$150	50	\$7,500	50	\$7,500
Erosion & Siltation Control	LS	\$30,000	1	\$30,000	1	\$30,000
Wetland Mitigation	SF	\$2.50	1600	\$4,000	1600	\$4,000
Structure						
Ret. Wall (Sta. 4267+00)	LF	\$1,800	900	\$1,620,000	900	\$1,620,000
Sub-Total				\$3,807,330		\$3,727,330
Miscellaneous ²				\$1,332,566		\$1,304,566
Contingency ³				\$761,466		\$745,466
TOTAL				\$5,901,362		\$5,777,362

¹ Includes sub-ballast, ballast, rail² 35% for minor pay item quantities (based on Sub -Total)³ 20% (based on Sub -Total)

CHERRY HILL/THIRD TRACK

1/26/2009

ALIGNMENT OPTIONS

LOCATION #: 9

STA. 4305+00 to STA. 4410+00

Preliminary Cost Estimate			East		West	
			Option 1		Option 2	
	Unit	Unit Cost	Quantity	Cost	Quantity	Cost
Track to be Constructed ¹	LF	\$300	1850	\$555,000	10500	\$3,150,000
Track to be Lined	LF	\$40	3000	\$120,000		\$0
No. 20 Turn Out	EA.	\$90,000		\$0		\$0
No. 20 Cross-Over	EA.	\$180,000	2	\$360,000	2	\$360,000
Track to be Upgraded	LF	\$70	8650	\$605,500		\$0
Earthwork	LS		1	\$300,000	1	\$1,200,000
Drainage Items						
72" I.D. Conc. Pipe	LF	\$110		\$0	20	\$2,200
78" R.C.P. Culvert	LF	\$110		\$0	20	\$2,200
20" C.I.P. with 18" Conc. Pipe Ext.	LF	\$50		\$0	20	\$1,000
24" C.I.P. with 24" Conc. Pipe Ext.	LF	\$50		\$0	20	\$1,000
3'x3' Stone Box w/ 38" Conc. Pipe Ext.	LF	\$65		\$0	20	\$1,300
20" C.I.P. with 21" Conc. Pipe Ext.	LF	\$50		\$0	20	\$1,000
24" C.I.P. - 180'	LF	\$50		\$0	20	\$1,000
20" C.I. Pipe with 21" Conc. Pipe Ext.	LF	\$50		\$0	20	\$1,000
24" C.I.P. - 120' w/ 24" Conc. Pipe Ext.	LF	\$50	20	\$1,000	20	\$1,000
30" C.I.P. - 168'	LF	\$50	20	\$1,000	20	\$1,000
Erosion & Siltation Control	LS		1	\$30,000	1	\$45,000
Wetland Mitigation	SF	\$2.50		\$0	53000	\$132,500
Structure						
Ret. Wall (Sta. 4320+00)	LF	\$1,800	500	\$900,000	700	\$1,260,000
Sub-Total				\$2,872,500		\$6,160,200
Miscellaneous ²				\$1,005,375		\$2,156,070
Contingency ³				\$574,500		\$1,232,040
TOTAL				\$4,452,375		\$9,548,310

¹ Includes sub-ballast, ballast, rail² 35% for minor pay item quantities (based on Sub -Total)³ 20% (based on Sub -Total)

CHERRY HILL/THIRD TRACK

1/26/2009

ALIGNMENT OPTIONS

LOCATION #: 10

STA. 4410+00 to STA. 4445+00

Preliminary Cost Estimate			East		West	
			Option 1		Option 2	
	Unit	Unit Cost	Quantity	Cost	Quantity	Cost
Track to be Constructed ¹	LF	\$300	3500	\$1,050,000	3500	\$1,050,000
Track to be Lined	LF	\$40	4000	\$160,000	1000	\$40,000
No. 20 Turn Out	EA.	\$90,000		\$0		\$0
No. 20 Cross-Over	EA.	\$180,000		\$0		\$0
Earthwork	LS		1	\$250,000	1	\$550,000
Drainage Items						
24" C.I. Pipe	LF	\$50	20	\$1,000	20	\$1,000
12" C.I. & 2'x2' Box	LF	\$50	20	\$1,000	20	\$1,000
Erosion & Siltation Control	LS	\$20,000	1	\$20,000	1	\$20,000
Wetland Mitigation	SF	\$2.50	15000	\$37,500	20000	\$50,000
Retaining wall (sta. 4440)	LF	\$1,800			400	\$720,000
Structure (Crash Walls)	LS	\$45,500	1	\$45,500	1	\$45,500
Sub-Total				\$1,565,000		\$2,477,500
Miscellaneous ²				\$547,750		\$867,125
Contingency ³				\$313,000		\$495,500
TOTAL				\$2,425,750		\$3,840,125

¹ Includes sub-ballast, ballast, rail² 35% for minor pay item quantities (based on Sub -Total)³ 20% (based on Sub -Total)

CHERRY HILL/THIRD TRACK

1/26/2009

ALIGNMENT OPTIONS

LOCATION #: 11
 STA. 4445+00 to STA. 4460+00

Preliminary Cost Estimate			West	
			Option 2	
	Unit	Unit Cost	Quantity	Cost
Track to be Constructed ¹	LF	\$300	1500	\$450,000
Track to be Lined	LF	\$40		\$0
No. 20 Turn Out	EA.	\$90,000		\$0
No. 20 Cross-Over	EA.	\$180,000		\$0
Earthwork	LS	\$70,000	1	\$70,000
Drainage Items				
Erosion & Siltation Control	LS	\$15,000	1	\$15,000
Wetland Mitigation	SF	\$2.50		\$0
Structure	LS			\$0
(Grade Separation by Others)				
Sub-Total				\$535,000
Miscellaneous ²				\$187,250
Contingency ³				\$107,000
TOTAL				\$829,250

¹ Includes sub-ballast, ballast, rail

² 35% for minor pay item quantities (based on Sub -Total)

³ 20% (based on Sub -Total)

CHERRY HILL/THIRD TRACK

1/26/2009

ALIGNMENT OPTIONS

LOCATION #: 12

STA. 4460+00 to STA. 4505+00

Preliminary Cost Estimate			East		West	
			Option 1		Option 2	
	Unit	Unit Cost	Quantity	Cost	Quantity	Cost
Track to be Constructed ¹	LF	\$300	2500	\$750,000	2500	\$750,000
Track to be Lined	LF	\$40	2000	\$80,000		\$0
No. 20 Turn Out	EA.	\$90,000	1	\$90,000	1	\$90,000
No. 20 Cross-Over	EA.	\$180,000		\$0		\$0
Earthwork	LS		1	\$150,000	1	\$60,000
Drainage Items						
18" Armco Pipe	LF	\$50	20	\$1,000	20	\$1,000
18" Armco Pipe	LF	\$50	20	\$1,000	20	\$1,000
30" Conc. Pipe	LF	\$65	20	\$1,300	20	\$1,300
30" Conc. Pipe	LF	\$65	20	\$1,300	20	\$1,300
Erosion & Siltation Control	LS		1	\$20,000	1	\$20,000
Wetland Mitigation	SF	\$2.50		\$0	3000	\$7,500
Structure	LS			\$0		\$0
Sub-Total				\$1,094,600		\$932,100
Miscellaneous ²				\$383,110		\$326,235
Contingency ³				\$218,920		\$186,420
TOTAL				\$1,696,630		\$1,444,755

¹ Includes sub-ballast, ballast, rail² 35% for minor pay item quantities (based on Sub -Total)³ 20% (based on Sub -Total)



Virginia Railway Express

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February 9, 2009

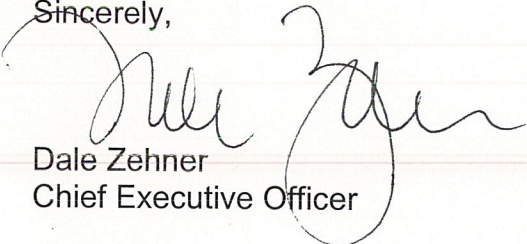
Mr. Michael Knott, PE
Manager of Rail Development PPMC
DRPT
1313 East Main Street, Suite 300
Richmond, VA 23219

Dear Mr. Knott:

Enclosed please find the fully executed REF application and attachments for the Arkendale-Powell's Creek Third Track Cherry Hill VRE Station: Phase III – Permitting, Right of Way Acquisition and First Year Construction project.

In addition, as requested in your February 6, 2009 email, I have included progress drawings and the cost estimate. However, please note that these documents are in development now and therefore should be considered draft.

Sincerely,


Dale Zehner
Chief Executive Officer

Enclosures

- A Transportation Partnership -

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Transportation Commission
4350 North Fairfax Drive, Suite 720
Arlington, Virginia 22203
(703) 524-3322

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